

288704US0PCT.ST25
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<110> Tohata, Masatoshi
Sawada, Kazuhisa
Ozaki, Katsuya
Sekiguchi, Junichi

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<141> 2006-05-08

<150> PCT/JP04/16890

<151> 2004-11-05

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tat Tyr	gta Val	cgt Arg 385	gct Ala	cgt Arg	att Ile	aaa Lys	ggg Gly 390	gtg Val	aac Asn	tat Tyr	gag Glu	cca Pro 395	atc Ile	gac Asp	cgt Arg	1803
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gga Gly 415	ttt Phe	gga Gly	gtg Val	aat Asn	gga Gly 420	gat Asp	tct Ser	cca Pro	gtt Val	gaa Glu 425	gat Asp	gta Val	gtt Val	att Ile	gag Glu 430	1899
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gtt Val	tct Ser	gaa Glu	ggg Gly 450	aat Asn	tac Tyr	tgg Trp	gct Ala	aat Asn 455	gct Ala	cgt Arg	ctt Leu	tct Ser	gcc Ala 460	gac Asp	ggg Gly	1995
tgg Trp	gga Gly	aaa Lys 465	agt Ser	gtt Val	gat Asp	att Ile	tta Leu 470	ggg Gly	gct Ala	gaa Glu	aaa Lys	ctt Leu 475	act Thr	atg Met	gat Asp	2043
gtg Val	att Ile 480	gtt Val	gat Asp	gag Glu	ccg Pro	acc Thr 485	acg Thr	gta Val	tca Ser	att Ile	gct Ala 490	gca Ala	att Ile	cca Pro	caa Gln	2091
ggg Gly 495	cca Pro	tca Ser	gcc Ala	aat Asn	tgg Trp 500	gtt Val	aat Asn	cca Pro	aat Asn	cgt Arg 505	gca Ala	att Ile	aag Lys	gtt Val	gag Glu 510	2139
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ata Ile	act Thr	tca Ser	gct Ala 530	gac Asp	tct Ser	cca Pro	tcg Ser	tta Leu 535	gaa Glu	gct Ala	att Ile	gag Ala	atg Met 540	cat His	gct Ala	2235
gaa Glu	aat Asn	aac Asn 545	aac Asn	atc Ile	aac Asn	aac Asn	atc Ile 550	att Ile	ctt Leu	ttt Phe	gta Val	gga Gly 555	act Thr	gaa Glu	ggg Gly	2283
gct Ala	gat Asp 560	gtt Val	atc Ile	tat Tyr	tta Leu	gat Asp 565	aac Asn	att Ile	aaa Lys	gta Val	att Ile 570	gga Gly	aca Thr	gaa Glu	gtt Val	2331
gaa Glu 575	att Ile	cca Pro	gtt Val	gtt Val	cat His 580	gat Asp	cca Pro	aaa Lys	gga Gly	gaa Glu 585	gct Ala	gtt Val	ctt Leu	cct Pro	tct Ser 590	2379
gtt Val	ttt Phe	gaa Glu	gac Asp	ggg Gly 595	aca Thr	cgt Arg	caa Gln	ggg Gly	tgg Trp 600	gac Asp	tgg Trp	gct Ala	gga Gly	gag Glu 605	tct Ser	2427
ggg Gly	gtg Val	aaa Lys	aca Thr 610	gct Ala	tta Leu	aca Thr	att Ile	gaa Glu 615	gaa Glu	gca Ala	aac Asn	ggg Gly	tct Ser 620	aac Asn	gag Ala	2475
tta Leu	tca Ser	tgg Trp	gaa Glu	ttt Phe	gga Gly	tac Tyr	cca Pro	gaa Glu	gta Val	aaa Lys	cct Pro	agt Ser	gat Asp	aac Asn	tgg Trp	2523

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625					630					635						
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gaa	aat	gat	tat	gta	act	ttt	gat	ttc	tat	cta	gat	cca	gtt	cgt	gca	2619
Glu	Asn	Asp	Tyr	Val	Thr	Phe	Asp	Phe	Tyr	Leu	Asp	Pro	Val	Arg	Ala	
655					660					665					670	
aca	gaa	ggc	gca	atg	aat	atc	aat	tta	gta	ttc	cag	cca	cct	act	aac	2667
Thr	Glu	Gly	Ala	Met	Asn	Ile	Asn	Leu	Val	Phe	Gln	Pro	Pro	Thr	Asn	
				675					680					685		
ggg	tat	tgg	gta	caa	gca	cca	aaa	acg	tat	acg	att	aac	ttt	gat	gaa	2715
Gly	Tyr	Trp	Val	Gln	Ala	Pro	Lys	Thr	Tyr	Thr	Ile	Asn	Phe	Asp	Glu	
			690					695					700			
tta	gag	gaa	gcg	aat	caa	gta	aat	ggg	tta	tat	cac	tat	gaa	gtg	aaa	2763
Leu	Glu	Glu	Ala	Asn	Gln	Val	Asn	Gly	Leu	Tyr	His	Tyr	Glu	Val	Lys	
		705					710					715				
att	aac	gta	aga	gat	att	aca	aac	att	caa	gat	gac	acg	tta	cta	cgt	2811
Ile	Asn	Val	Arg	Asp	Ile	Thr	Asn	Ile	Gln	Asp	Asp	Thr	Leu	Leu	Arg	
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aac	atg	atg	atc	att	ttt	gca	gat	gta	gaa	agt	gac	ttt	gca	ggg	aga	2859
Asn	Met	Met	Ile	Ile	Phe	Ala	Asp	Val	Glu	Ser	Asp	Phe	Ala	Gly	Arg	
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gtc	ttt	gta	gat	aat	gtt	cgt	ttt	gag	ggg	gct	gct	act	act	gag	ccg	2907
Val	Phe	Val	Asp	Asn	Val	Arg	Phe	Glu	Gly	Ala	Ala	Thr	Thr	Glu	Pro	
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gtt	gaa	cca	gag	cca	gtt	gat	cct	ggc	gaa	gag	acg	ccg	cct	gtc	gat	2955
Val	Glu	Pro	Glu	Pro	Val	Asp	Pro	Gly	Glu	Glu	Thr	Pro	Pro	Val	Asp	
			770					775					780			
gag	aag	gaa	gcg	aaa	aaa	gaa	caa	aaa	gaa	gca	gag	aaa	gaa	gag	aaa	3003
Glu	Lys	Glu	Ala	Lys	Lys	Glu	Gln	Lys	Glu	Ala	Glu	Lys	Glu	Glu	Lys	
		785					790					795				
gaa	gca	gta	aaa	gaa	gaa	aag	aaa	gaa	gct	aaa	gaa	gaa	aag	aaa	gca	3051
Glu	Ala	Val	Lys	Glu	Glu	Lys	Lys	Glu	Ala	Lys	Glu	Glu	Lys	Lys	Ala	
	800					805					810					
atc	aaa	aat	gag	gct	acg	aaa	aaa	taatctaata	aactagttat	agggttatct						3105
Ile	Lys	Asn	Glu	Ala	Thr	Lys	Lys									
815					820											
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attaaagaaa	gcaaggtggt	tatacgatat	taaaaaggta	gcgattttta	attgaaacct											3225
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 Asn Thr Arg Glu Asp Asn Phe Lys His Leu Leu Gly Asn Asp Asn Val
 35 40 45
 Lys Arg Pro Ser Glu Ala Gly Ala Leu Gln Leu Gln Glu Val Asp Gly
 50 55 60
 Gln Met Thr Leu Val Asp Gln His Gly Glu Lys Ile Gln Leu Arg Gly
 65 70 75 80
 Met Ser Thr His Gly Leu Gln Trp Phe Pro Glu Ile Leu Asn Asp Asn
 85 90 95
 Ala Tyr Lys Ala Leu Ala Asn Asp Trp Glu Ser Asn Met Ile Arg Leu
 100 105 110
 Ala Met Tyr Val Gly Glu Asn Gly Tyr Ala Ser Asn Pro Glu Leu Ile
 115 120 125
 Lys Ser Arg Val Ile Lys Gly Ile Asp Leu Ala Ile Glu Asn Asp Met
 130 135 140
 Tyr Val Ile Val Asp Trp His Val His Ala Pro Gly Asp Pro Arg Asp
 145 150 155 160
 Pro Val Tyr Ala Gly Ala Glu Asp Phe Phe Arg Asp Ile Ala Ala Leu
 165 170 175
 Tyr Pro Asn Asn Pro His Ile Ile Tyr Glu Leu Ala Asn Glu Pro Ser
 180 185 190
 Ser Asn Asn Asn Gly Gly Ala Gly Ile Pro Asn Asn Glu Glu Gly Trp
 195 200 205
 Asn Ala Val Lys Glu Tyr Ala Asp Pro Ile Val Glu Met Leu Arg Asp
 210 215 220
 Ser Gly Asn Ala Asp Asp Asn Ile Ile Ile Val Gly Ser Pro Asn Trp
 225 230 235 240
 Ser Gln Arg Pro Asp Leu Ala Ala Asp Asn Pro Ile Asp Asp His His
 245 250 255
 Thr Met Tyr Thr Val His Phe Tyr Thr Gly Ser His Ala Ala Ser Thr
 260 265 270
 Glu Ser Tyr Pro Pro Glu Thr Pro Asn Ser Glu Arg Gly Asn Val Met
 275 280 285

Ser Asn Thr Arg Tyr Ala Leu Glu Asn Gly Val Ala Val Phe Ala Thr
 290 295 300
 Glu Trp Gly Thr Ser Gln Ala Asn Gly Asp Gly Gly Pro Tyr Phe Asp
 305 310 315 320
 Glu Ala Asp Val Trp Ile Glu Phe Leu Asn Glu Asn Asn Ile Ser Trp
 325 330 335
 Ala Asn Trp Ser Leu Thr Asn Lys Asn Glu Val Ser Gly Ala Phe Thr
 340 345 350
 Pro Phe Glu Leu Gly Lys Ser Asn Ala Thr Ser Leu Asp Pro Gly Pro
 355 360 365
 Asp Gln Val Trp Val Pro Glu Glu Leu Ser Leu Ser Gly Glu Tyr Val
 370 375 380
 Arg Ala Arg Ile Lys Gly Val Asn Tyr Glu Pro Ile Asp Arg Thr Lys
 385 390 395 400
 Tyr Thr Lys Val Leu Trp Asp Phe Asn Asp Gly Thr Lys Gln Gly Phe
 405 410 415
 Gly Val Asn Gly Asp Ser Pro Val Glu Asp Val Val Ile Glu Asn Glu
 420 425 430
 Ala Gly Ala Leu Lys Leu Ser Gly Leu Asp Ala Ser Asn Asp Val Ser
 435 440 445
 Glu Gly Asn Tyr Trp Ala Asn Ala Arg Leu Ser Ala Asp Gly Trp Gly
 450 455 460
 Lys Ser Val Asp Ile Leu Gly Ala Glu Lys Leu Thr Met Asp Val Ile
 465 470 475 480
 Val Asp Glu Pro Thr Thr Val Ser Ile Ala Ala Ile Pro Gln Gly Pro
 485 490 495
 Ser Ala Asn Trp Val Asn Pro Asn Arg Ala Ile Lys Val Glu Pro Thr
 500 505 510
 Asn Phe Val Pro Leu Gly Asp Lys Phe Lys Ala Glu Leu Thr Ile Thr
 515 520 525
 Ser Ala Asp Ser Pro Ser Leu Glu Ala Ile Ala Met His Ala Glu Asn
 530 535 540
 Asn Asn Ile Asn Asn Ile Ile Leu Phe Val Gly Thr Glu Gly Ala Asp
 545 550 555 560

Val Ile Tyr Leu Asp₅₆₅ Asn Ile Lys Val Ile₅₇₀ Gly Thr Glu Val Glu₅₇₅ Ile
 Pro Val Val His₅₈₀ Asp Pro Lys Gly Glu₅₈₅ Ala Val Leu Pro Ser₅₉₀ Val Phe
 Glu Asp Gly₅₉₅ Thr Arg Gln Gly Trp₆₀₀ Asp Trp Ala Gly Glu₆₀₅ Ser Gly Val
 Lys Thr₆₁₀ Ala Leu Thr Ile Glu₆₁₅ Glu Ala Asn Gly Ser₆₂₀ Asn Ala Leu Ser
 Trp₆₂₅ Glu Phe Gly Tyr Pro₆₃₀ Glu Val Lys Pro Ser₆₃₅ Asp Asn Trp Ala Thr₆₄₀
 Ala Pro Arg Leu Asp₆₄₅ Phe Trp Lys Ser Asp₆₅₀ Leu Val Arg Gly Glu₆₅₅ Asn
 Asp Tyr Val Thr₆₆₀ Phe Asp Phe Tyr Leu₆₆₅ Asp Pro Val Arg Ala₆₇₀ Thr Glu
 Gly Ala Met₆₇₅ Asn Ile Asn Leu Val₆₈₀ Phe Gln Pro Pro Thr₆₈₅ Asn Gly Tyr
 Trp Val Gln Ala Pro Lys Thr₆₉₅ Tyr Thr Ile Asn Phe₇₀₀ Asp Glu Leu Glu
 Glu₇₀₅ Ala Asn Gln Val Asn₇₁₀ Gly Leu Tyr His Tyr₇₁₅ Glu Val Lys Ile Asn₇₂₀
 Val Arg Asp Ile Thr₇₂₅ Asn Ile Gln Asp Asp₇₃₀ Thr Leu Leu Arg Asn₇₃₅ Met
 Met Ile Ile Phe₇₄₀ Ala Asp Val Glu Ser₇₄₅ Asp Phe Ala Gly Arg₇₅₀ Val Phe
 Val Asp Asn₇₅₅ Val Arg Phe Glu Gly₇₆₀ Ala Ala Thr Thr Glu₇₆₅ Pro Val Glu
 Pro Glu₇₇₀ Pro Val Asp Pro Gly₇₇₅ Glu Glu Thr Pro Pro₇₈₀ Val Asp Glu Lys
 Glu₇₈₅ Ala Lys Lys Glu Gln₇₉₀ Lys Glu Ala Glu Lys₇₉₅ Glu Glu Lys Glu Ala₈₀₀
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 Asn Glu Ala Thr₈₂₀ Lys Lys

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aactaaagat tgaaatagaa gtagaagaca acggacataa gaaaattgta ttagtttttaa 180

ttatagaaaa cgctttttcta taattatttta tacctagaac gaaaataactg tttcgaaagc 240

ggttttactat aaaaccttat attccggctc ttttttttaa caggggggtga aaattcactc 300

tagtatttcta atttcaacat gctataataa atttgtaaga cgcaatatac atctttttttt 360

tatgatatttt gtaagcgggtt aaccttgtgc tatatgccga ttttaggaagg gggtagattg 420

agtcaagtag tcataatttta gataacttat aagttgttga gaagcaggag agaattctggg 480

ttactcacia gtttttttaa acattatcga aagcactttc ggttatgctt atgaatttag 540

ctatttgatt caattacttt aataatttta ggaggtaat atg atg tta aga aag 594

Met Met Leu Arg Lys
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Lys Thr Lys Gln Leu Gly Arg Pro Ala Gln Ala Asp Gly Leu Asn Gly
10 15 20acg atg atg cag tat tat gag tgg cat ttg gaa aac gac ggg cag cat 690
Thr Met Met Gln Tyr Tyr Glu Trp His Leu Glu Asn Asp Gly Gln His
25 30 35tgg aat cgg ttg cac gat gat gcc gca gct ttg agt gat gct ggt att 738
Trp Asn Arg Leu His Asp Asp Ala Ala Leu Ser Asp Ala Gly Ile
40 45 50aca gct att tgg att ccg cca gcc tac aaa ggt aat agt cag gcg gat 786
Thr Ala Ile Trp Ile Pro Pro Ala Tyr Lys Gly Asn Ser Gln Ala Asp
55 60 65gtt ggg tac ggt gca tac gat ctt tat gat tta gga gag ttc aat caa 834
Val Gly Tyr Gly Ala Tyr Asp Leu Tyr Asp Leu Gly Glu Phe Asn Gln
70 75 80 85aag ggt act gtt cga acg aaa tac gga act aag gca cag ctt gaa cga 882
Lys Gly Thr Val Arg Thr Lys Tyr Gly Thr Lys Ala Gln Leu Glu Arg
90 95 100gct att ggg tcc ctt aaa tct aat gat atc aat gta tac gga gat gtc 930
Ala Ile Gly Ser Leu Lys Ser Asn Asp Ile Asn Val Tyr Gly Asp Val
105 110 115gtg atg aat cat aaa atg gga gct gat ttt acg gag gca gtg caa gct 978
Val Met Asn His Lys Met Gly Ala Asp Phe Thr Glu Ala Val Gln Ala
120 125 130gtt caa gta aat cca acg aat cgt tgg cag gat att tca ggt gcc tac 1026
Val Gln Val Asn Pro Thr Asn Arg Trp Gln Asp Ile Ser Gly Ala Tyr
135 140 145acg att gat gcg tgg acg ggt ttc gac ttt tca ggg cgt aac aac gcc 1074
Thr Ile Asp Ala Trp Thr Gly Phe Asp Phe Ser Gly Arg Asn Asn Ala
150 155 160 165

tat tca gat ttt aag tgg aga tgg ttc cat ttt aat ggt gtt gac tgg 1122

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Tyr	Ser	Asp	Phe	Lys 170	Trp	Arg	Trp	Phe	His 175	Phe	Asn	Gly	Val	Asp 180	Trp	
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tgg Trp	aac Asn	tgg Trp 200	cga Arg	gtg Val	gat Asp	gaa Glu	gag Glu 205	aac Asn	ggg Gly	aat Asn	tat Tyr	gat Asp 210	tac Tyr	ctg Leu	tta Leu	1218
gga Gly	tcg Ser 215	aat Asn	atc Ile	gac Asp	ttt Phe	agt Ser 220	cat His	cca Pro	gaa Glu	gta Val	caa Gln 225	gat Asp	gag Glu	ttg Leu	aag Lys	1266
gat Asp 230	tgg Trp	ggg Gly	agc Ser	tgg Trp	ttt Phe 235	acc Thr	gat Asp	gag Glu	tta Leu	gat Asp 240	ttg Leu	gat Asp	ggg Gly	tat Tyr	cgt Arg 245	1314
tta Leu	gat Asp	gct Ala	att Ile	aaa Lys 250	cat His	att Ile	cca Pro	ttc Phe	tgg Trp 255	tat Tyr	aca Thr	tct Ser	gat Asp	tgg Trp 260	gtt Val	1362
cgg Arg	cat His	cag Gln	cgc Arg 265	aac Asn	gaa Glu	gca Ala	gat Asp	caa Gln 270	gat Asp	tta Leu	ttt Phe	gtc Val	gta Val 275	ggg Gly	gaa Glu	1410
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cgg Arg 310	gct Ala	tca Ser	caa Gln	caa Gln	ggg Gly 315	gga Gly	agc Ser	tat Tyr	gat Asp	atg Met 320	cgt Arg	aat Asn	att Ile	tta Leu	cga Arg 325	1554
gga Gly	tct Ser	tta Leu	gta Val	gaa Glu 330	gcg Ala	cat His	ccg Pro	atg Met	cat His 335	gca Ala	gtt Val	acg Thr	ttt Phe	gtt Val 340	gat Asp	1602
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tat Tyr	cca Pro 375	aat Asn	gta Val	ttt Phe	tac Tyr	ggg Gly 380	gat Asp	tac Tyr	tat Tyr	ggg Gly	att Ile 385	cct Pro	aac Asn	gat Asp	aac Asn	1746
att Ile 390	tca Ser	gct Ala	aaa Lys	aaa Lys	gat Asp 395	atg Met	att Ile	gat Asp	gag Glu	ctg Leu 400	ctt Leu	gat Asp	gca Ala	cgt Arg	caa Gln 405	1794
aat Asn	tac Tyr	gca Ala	tat Tyr	ggc Gly 410	acg Thr	cag Gln	cat His	gac Asp	tat Tyr 415	ttt Phe	gat Asp	cat His	tgg Trp	gat Asp 420	gtt Val	1842
gta Val	gga Gly	tgg Trp	act Thr 425	agg Arg	gaa Glu	gga Gly	tct Ser	tcc Ser 430	tcc Ser	aga Arg	cct Pro	aat Asn	tca Ser 435	ggc Gly	ctt Leu	1890
gcg	act	att	atg	tcg	aat	gga	cct	ggg	ggg	tcc	aag	tgg	atg	tat	gta	1938

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Ala Thr Ile Met Ser Asn Gly Pro Gly Gly Ser Lys Trp Met Tyr Val
440 445 450

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Gly Arg Gln Asn Ala Gly Gln Thr Trp Thr Asp Leu Thr Gly Asn Asn
455 460 465

gga gcg tcc gtt aca att aat ggc gat gga tgg ggc gaa ttc ttt acg 2034
Gly Ala Ser Val Thr Ile Asn Gly Asp Gly Trp Gly Glu Phe Phe Thr
470 475 480 485

aat gga gga tct gta tcc gtg tac gtg aac caa taacaaaaag ccttgagaag 2087
Asn Gly Gly Ser Val Ser Val Tyr Val Asn Gln
490 495

ggattcctcc ctaactcaag gctttcttta tgtcgcttag ctttacgctt ctacgacttt 2147

gaagcttggg gatccgtcga gacaaggtaa aggataaaac agcacaattc caagaaaaac 2207

acgatttaga acctaaaaag aacgaatttg aactaactca taaccgagag gtaaaaaaag 2267

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ttttttgatg tctaga 2343

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20 25 30

Asn Asp Gly Gln His Trp Asn Arg Leu His Asp Asp Ala Ala Ala Leu
35 40 45

Ser Asp Ala Gly Ile Thr Ala Ile Trp Ile Pro Pro Ala Tyr Lys Gly
50 55 60

Asn Ser Gln Ala Asp Val Gly Tyr Gly Ala Tyr Asp Leu Tyr Asp Leu
65 70 75 80

Gly Glu Phe Asn Gln Lys Gly Thr Val Arg Thr Lys Tyr Gly Thr Lys
85 90 95

Ala Gln Leu Glu Arg Ala Ile Gly Ser Leu Lys Ser Asn Asp Ile Asn
100 105 110

Val Tyr Gly Asp Val Val Met Asn His Lys Met Gly Ala Asp Phe Thr
115 120 125

Glu Ala Val Gln Ala Val Gln Val Asn Pro Thr Asn Arg Trp Gln Asp
130 135 140

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Ile Ser Gly Ala Tyr Thr Ile Asp Ala Trp Thr Gly Phe Asp Phe Ser
 145 150 155 160
 Gly Arg Asn Asn Ala Tyr Ser Asp Phe Lys Trp Arg Trp Phe His Phe
 165 170 175
 Asn Gly Val Asp Trp Asp Gln Arg Tyr Gln Glu Asn His Ile Phe Arg
 180 185 190
 Phe Ala Asn Thr Asn Trp Asn Trp Arg Val Asp Glu Glu Asn Gly Asn
 195 200 205
 Tyr Asp Tyr Leu Leu Gly Ser Asn Ile Asp Phe Ser His Pro Glu Val
 210 215 220
 Gln Asp Glu Leu Lys Asp Trp Gly Ser Trp Phe Thr Asp Glu Leu Asp
 225 230 235 240
 Leu Asp Gly Tyr Arg Leu Asp Ala Ile Lys His Ile Pro Phe Trp Tyr
 245 250 255
 Thr Ser Asp Trp Val Arg His Gln Arg Asn Glu Ala Asp Gln Asp Leu
 260 265 270
 Phe Val Val Gly Glu Tyr Trp Lys Asp Asp Val Gly Ala Leu Glu Phe
 275 280 285
 Tyr Leu Asp Glu Met Asn Trp Glu Met Ser Leu Phe Asp Val Pro Leu
 290 295 300
 Asn Tyr Asn Phe Tyr Arg Ala Ser Gln Gln Gly Gly Ser Tyr Asp Met
 305 310 315 320
 Arg Asn Ile Leu Arg Gly Ser Leu Val Glu Ala His Pro Met His Ala
 325 330 335
 Val Thr Phe Val Asp Asn His Asp Thr Gln Pro Gly Glu Ser Leu Glu
 340 345 350
 Ser Trp Val Ala Asp Trp Phe Lys Pro Leu Ala Tyr Ala Thr Ile Leu
 355 360 365
 Thr Arg Glu Gly Gly Tyr Pro Asn Val Phe Tyr Gly Asp Tyr Tyr Gly
 370 375 380
 Ile Pro Asn Asp Asn Ile Ser Ala Lys Lys Asp Met Ile Asp Glu Leu
 385 390 395 400
 Leu Asp Ala Arg Gln Asn Tyr Ala Tyr Gly Thr Gln His Asp Tyr Phe
 405 410 415

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Asp His Trp Asp Val Val Gly Trp Thr Arg Glu Gly Ser Ser Ser Arg
420 425 430

Pro Asn Ser Gly Leu Ala Thr Ile Met Ser Asn Gly Pro Gly Gly Ser
435 440 445

Lys Trp Met Tyr Val Gly Arg Gln Asn Ala Gly Gln Thr Trp Thr Asp
450 455 460

Leu Thr Gly Asn Asn Gly Ala Ser Val Thr Ile Asn Gly Asp Gly Trp
465 470 475 480

Gly Glu Phe Phe Thr Asn Gly Gly Ser Val Ser Val Tyr Val Asn Gln
485 490 495